WHAT IS CLAIMED IS:

1.   A system for dispersing the load of a network
in data communications between a central computer and a
plurality of remote nodes that are connected to the
5   central computer via a broadband network, wherein
                the central computer comprises:
                a communication order determining unit
that determines an order of communications between the
central computer and the plurality of remote nodes, in
10   order to avoid local traffic congestion in a
communication route within the broadband network;
                a communication interval determining unit
that determines a communication interval between a remote
node with which the central computer communicates this
15   time and a remote node with which the central computer
communicates next time, among the plurality of remote
nodes that communicate with the central computer; and
                a communication control unit that controls
data communications between the central computer and the
20   plurality of remote nodes, according to the communication
order and the communication interval.

2.   The system for dispersing the load of a
network, according to claim 1, wherein
                the communication interval is obtained as
25   follows: a repetition period for repetitively executing
communications with the whole plurality of remote nodes
is divided by a total number of the remote nodes, and a
quotient obtained is subtracted by a processing time per
one node thereby to obtain the communication interval
30   which includes a communication waiting time.

3.   The system for dispersing the load of a
network, according to claim 1, wherein
                the plurality of remote nodes are divided
into groups of a plurality of transmission lines, and
35   the frequency that the transmission lines
divided into the groups are used for communications is
increased in proportion to the number of remote nodes

that are accommodated in the divided groups of
transmission lines.

    4.   The system for dispersing the load of a
network, according to claim 2, wherein

5   the plurality of remote nodes are divided
into groups of a plurality of transmission lines, and
           the frequency that the transmission lines
divided into the groups are used for communications is
increased in proportion to the number of remote nodes

10   that are accommodated in the divided groups of
transmission lines.

    5.   The system for dispersing the load of a network
according to claim 1, wherein
           the plurality of remote nodes are divided

15   into groups of a plurality of transmission lines, and
           the frequency that the transmission lines
divided into the groups are used for communications is
increased in proportion to the line speeds of the divided
transmission lines.

20   6.   The system for dispersing the load of a network
according to claim 2, wherein
           the plurality of remote nodes are divided
into groups of a plurality of transmission lines, and
           the frequency that the transmission lines

25   divided into the groups are used for communications is
increased in proportion to the line speeds of the divided
transmission lines.

    7.   A system for dispersing the load of a network
in a monitoring unit that carries out polling to a

30   plurality of nodes to be monitored that are connected via
a broadband network, wherein
           the monitoring unit comprises:
           a polling order determining unit that
determines an order of polling the plurality of nodes to

35   be monitored;
           a polling interval determining unit that
determines a polling interval between the nodes to be

monitored; and

a control unit that controls the monitoring unit to carry out polling of the plurality of nodes to be monitored, according to the polling order and
5   the polling interval.

8.   A method of dispersing the load of a network in data communications between a central computer and a plurality of remote nodes that are connected to the central computer via a broadband network, the method
10   comprising the steps of:

determining an order of communications between the central computer and the plurality of remote nodes, in order to avoid local traffic congestion in a communication route within the broadband network;
15   determining a communication interval between a remote node with which the central computer communicates this time and a remote node with which the central computer communicates next time, among the plurality of remote nodes that communicate with the
20   central computer; and

controlling data communications between the central computer and the plurality of remote nodes, according to the communication order and the communication interval.

25   9.   The method of dispersing the load of a network according to claim 8, wherein

the communication interval is obtained as follows: a repetition period for repetitively executing communications with the whole plurality of remote nodes
30   is divided by a total number of the remote nodes, and a quotient obtained is subtracted by a processing time per one node thereby to obtain the communication interval which includes a communication waiting time.

10. The method of dispersing the load of a network,
35   according to claim 8, wherein

the plurality of remote nodes are divided into groups of a plurality of transmission lines, and

the frequency that the transmission lines
divided into the groups are used for communications is
increased in proportion to the number of remote nodes
that are accommodated in the divided groups of
5   transmission lines.

       11.   The method of dispersing the load of a network,
according to claim 9, wherein

       the plurality of remote nodes are divided
into groups of a plurality of transmission lines, and
10   the frequency that the transmission lines
divided into the groups are used for communications is
increased in proportion to the number of remote nodes
that are accommodated in the divided groups of
transmission lines.

15   12.   The method of dispersing the load of a network,
according to claim 8, wherein

       the plurality of remote nodes are divided
into groups of a plurality of transmission lines, and

       the frequency that the transmission lines
20   divided into the groups are used for communications is
increased in proportion to the line speeds of the divided
transmission lines.

       13.   The method of dispersing the load of a network,
according to claim 9, wherein

25   the plurality of remote nodes are divided
into groups of a plurality of transmission lines, and

       the frequency that the transmission lines
divided into the groups are used for communications is
increased in proportion to the line speeds of the divided
30   transmission lines.

       14.   A method of dispersing the load of a network in
a monitoring unit that carries out polling to a plurality
of nodes to be monitored that are connected via a
broadband network, the method comprising the steps of:
35   determining an order of polling the
plurality of nodes to be monitored;

       determining a polling interval between the

nodes to be monitored; and

controlling the monitoring unit to carry out polling of the plurality of nodes to be monitored, according to the polling order and the polling interval.

5   15.   A computer-readable recording medium recorded with a program that is used in a system for dispersing the load of a network in data communications between a central computer and a plurality of remote nodes that are connected to the central computer via a broadband

10   network, wherein

the recording medium has been recorded with a program for making the central computer function as:

a communication order determining unit

15   that determines an order of communications between the central computer and the plurality of remote nodes, in order to avoid local traffic congestion in a communication route within the broadband network;

a communication interval determining unit

20   that determines a communication interval between a remote node with which the central computer communicates this time and a remote node with which the central computer communicates next time, among the plurality of remote nodes that communicate with the central computer; and

25   a communication control unit that controls data communications between the central computer and the plurality of remote nodes, according to the communication order and the communication interval.